

ADAPTIVE TYPE-PARTITIONED GARBAGE COLLECTION

ABSTRACT OF THE DISCLOSURE

A collector for collecting non-referenced objects stored in a heap by a program while the program is executing in a computer system is presented. A sample and
5 partition routine in the collector partitions the heap into cold space and hot space. The sample and partition routine defines hot space objects and cold space objects. After the heap has been partitioned, an object allocation routine in the collector stores hot space objects in hot space and cold space objects in cold space. A collection routine in the
10 collector searches hot space for referenced objects and reclaims non-referenced objects stored in hot space. Upon determining that hot space is full, the collection routine searches cold space and hot space for referenced objects and moves referenced objects stored in hot space to cold space

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